

REMARKS

Claims 18-81 are pending. Claims 18-24, 60-63, 66-69, and 78-81 have been withdrawn.

The Examiner has rejected claims 25-43, 45-59, 64 and 65 as anticipated by U.S. Patent No. 1,360,016 to Porter ("Porter"). In addition, claim 44 has been rejected as obvious over Porter. Applicants respectfully traverse these rejections and request that these rejections be withdrawn.

Independent claims 25, 42, 59, 64 and 65 each recite, in part, a cutting instrument including an outer member having an opening at least partially bounded by a cutting edge, as illustrated, for example, by the cutting edge 134 of the outer member 130 in applicant's Fig. 2.

The Examiner's rejection states "Porter discloses in figs. 2, 4-5, a cutting instrument having the limitations of the above listed claims, including: a cutting instrument comprises an outer member (4) has an opening bounded by a sharp cutting edge (3)..." Contrary to the Examiner's assertion, there is no opening of the shank 4 that is at least partially bounded by the end edge or top face 3 of a helical blade or lip 2 of Porter. Porter's shank 4 is tubular for receiving a screw 5, which is positioned within the shank 4 and threaded into the helical blade 2 to attach the blade 2 to the shank 4. Since the shank 4 is tubular, the shank does have openings at either end, but neither the end edge or top face 3 nor any other cutting edge of the instrument bounds an opening of the shank 4.

Furthermore, as end edge or top face 3 of Porter's instrument is at the distal end of the instrument, the helical blade or lip 2 and the end edge or top face 3 are not arranged such that sliced tissue is drawn proximally along a helical knife towards a sharp cutting edge (claims 25, 64, and 65), nor are the helical blade or lip 2 and the end edge or top face 3 arranged to create a shearing action therebetween (claims 25, 59, and 64).

Regarding the V-shaped cross section of claim 42, the Examiner refers to Fig. 4 of Porter, stating "(v-shaped is considered from the curve segment between element 2 and element 3) that defined a sharp, slicing edge which is perpendicular to a longitudinal extent of the slicing edge." The Examiner's reliance on Fig. 4 is not appropriate as the instrument of Fig. 4 does not include an outer member and an inner member received in the outer member for rotation relative to the outer member, as claimed in claim 42, but rather illustrates an instrument in which a cutter head

is integrally united with a shank. Furthermore, claim 42 recites that the slicing edge has a V-shaped cross section perpendicular to a longitudinal extent of the slicing edge. The curve segment between element 2 and element 3 of Fig. 4 of Porter is not a V-shaped cross-section of a slicing edge that is perpendicular to a longitudinal extent of the slicing edge.

Therefore, for at least these reasons, claims 25, 42, 59, 64 and 65, and their rejected dependent claims, are patentable over Porter.

The Examiner has rejected claims 25-41, 59, 64, and 70-77 as anticipated by U.S. Patent No. 6,053,923 to Veca et al. ("Veca"). Applicants respectfully traverse these rejections and request that these rejections be withdrawn.

Independent claims 25 and 59 each recite, in part, that the helical knife edge is arranged relative to the cutting edge such that the edges align in a plane substantially perpendicular to a longitudinal axis of the instrument to create a shearing action therebetween, as illustrated, for example, by the orientations of the cutting edge 134 and sharp-edged helix 121 in applicant's Figs. 2 and 3.

The Examiner's rejection states "As best seen in figures 8, 10, the helical knife [74] edge is arranged relative to the cutting edge [98] such that the edges align in a plane perpendicular to a longitudinal axis of the instrument which is able to create a shearing action therebetween." The conical transition region 98 and the abrader head 74 of Veca are both part of the inner tube assembly 66, and are not capable of relative movement; therefore, they do not create a shearing action therebetween. Nor is there any indication in Veca that the conical transition region 98 is a cutting edge. Rather, debris created by the engagement of helically shaped teeth 154 of Veca with tissue is drawn through suction ports 128 and 96 such that corresponding scalloped teeth 146 and sidewall 148 act to cut and chop the debris (*see, e.g., Veca at col. 6, lines 55-67*). Furthermore, according to claims 25 and 59, the cutting edge at least partially bounds an opening in an outer member. The conical transition region 98 does not at least partially bound an opening in the outer tube assembly 68.

In addition, even accepting for the sake of argument that a shield 132 of Veca's outer tube assembly 68 includes a cutting edge, at no point does an edge of the helically-shaped teeth 154 of the abrader head 74 align with an edge of the shield in a plane substantially perpendicular to a longitudinal axis of the abrader.

According to independent claim 64, an aspiration opening is located at a proximal portion of a helical knife. The Examiner's rejection states "Furthermore, the cutting instrument has an inner member 66 which defines an aspiration opening at 96 therein, the aspiration opening locates at a proximal portion of the helical knife." Contrary to the Examiner's assertion, the aspiration opening 96 of Veca is not located at any portion of the abrader head 74, but rather is spaced from the abrader head 74 (*see, e.g., Veca, Fig. 2*).

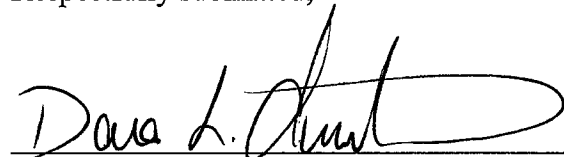
Therefore, for at least these reasons, claims 25, 59 and 64, and their rejected dependent claims, are patentable over Veca.

Applicants do not acquiesce in the examiner's characterizations of the art. For brevity and to advance prosecution, applicants may have not addressed all characterizations of the art and reserve the right to do so in further prosecution of this or a subsequent application. The absence of an explicit response by applicants to any of the Examiner's positions does not constitute a concession of the Examiner's positions. The fact that applicants' comments have focused on particular arguments does not constitute a concession that there are not other arguments for patentability of the claims.

No fees are believed to be due at this time. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 16 April 2007



Dana L. Christensen
Reg. No. 54,035

Fish & Richardson P.C.
1425 K Street, N.W.
11th Floor
Washington, DC 20005-3500
Telephone: (202) 783-5070
Facsimile: (202) 783-2331